

[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0413; Product Identifier 2017-SW-018-AD]

RIN 2120-AA64

Airworthiness Directives; Leonardo S.p.a. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for Leonardo S.p.a. (Leonardo) Model A109E, A109S, and AW109SP helicopters. This proposed AD would require inspecting each fire extinguisher bottle for a crack. This proposed AD was prompted by a report of a cracked fire extinguisher bottle. The actions of this proposed AD are intended to address an unsafe condition on these helicopters.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- <u>Federal eRulemaking Docket</u>: Go to https://www.regulations.gov. Follow the online instructions for sending your comments electronically.
 - <u>Fax</u>: 202-493-2251.
- <u>Mail</u>: Send comments to the U.S. Department of Transportation, Docket
 Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey
 Avenue SE, Washington, DC 20590-0001.

Hand Delivery: Deliver to the "Mail" address between 9 a.m. and 5 p.m.,
 Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0413; or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the European Union Aviation Safety Agency (previously European Aviation Safety Agency) (EASA) AD, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed rule, contact Leonardo, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at https://www.leonardocompany.com/en/home. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

FOR FURTHER INFORMATION CONTACT: Eric Haight, Aviation Safety Engineer, Regulations and Policy Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone 817-222-5110; email eric.haight@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to participate in this rulemaking by submitting written

comments, data, or views. The FAA also invites comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

The FAA will file in the docket all comments received, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, the FAA will consider all comments received on or before the closing date for comments. The FAA will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. The FAA may change this proposal in light of the comments received.

Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2016-0261R1, dated February 13, 2020, to correct an unsafe condition for Leonardo Model A109LUH, A109E, A109S, and AW109SP helicopters. EASA advises that a fractured bypass outlet assembly (assembly), which is a component of fire extinguishing bottle part number (P/N) 27300-1, was found during maintenance on a Model AW109SP helicopter. EASA states that this condition, if not detected and corrected, could affect the capability of the fire extinguishing system to extinguish a fire in the engine area, resulting in damage to the helicopter and injury to

any occupants. To address this unsafe condition, the EASA AD requires repetitive inspections of the assembly, and if there is a crack, replacing the fire extinguisher bottle. Due to similarity of design, EASA advises other helicopter models may be subject to the same unsafe condition.

FAA's Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA is proposing this AD after evaluating all known relevant information and determining that an unsafe condition is likely to exist or develop on other helicopters of the same type designs.

Related Service Information Under 1 CFR part 51

The FAA reviewed Leonardo Helicopters Bollettino Tecnico (BT) No. 109EP-152 for Model A109E helicopters, BT No. 109SP-108 for Model AW109SP helicopters, and BT No. 109S-073 for Model A109S helicopters, all dated December 15, 2016. The FAA also reviewed Leonardo Helicopters Alert Service Bulletin No. 109S-073, Revision A, dated November 23, 2019, for Model A109S helicopters. This service information contains procedures for inspecting the assembly for a crack and replacing the fire extinguishing bottle if there is a crack.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Proposed AD Requirements

This proposed AD would require, within 25 hours time-in-service (TIS) and thereafter at intervals not exceeding 200 hours TIS, inspecting the weld beads of each fire extinguisher bottle P/N 27300-1 assembly for a crack. If there is a crack, the proposed AD would require replacing the fire extinguisher bottle before further flight. This proposed AD would also prohibit the installation of a fire extinguisher bottle P/N 27300-1 on any helicopter unless it has met the requirements of this AD.

Differences between this Proposed AD and the EASA AD

The EASA AD applies to Model A109LUH helicopters; this proposed AD does not as that model helicopter is not type certificated in the U.S.

Interim Action

The FAA considers this proposed AD to be an interim action. If final action is later identified, the FAA might consider further rulemaking.

Costs of Compliance

The FAA estimates that this proposed AD would affect 107 helicopters of U.S. Registry. The FAA estimates that operators may incur the following costs in order to comply with this proposed AD. Labor costs are estimated at \$85 per work-hour.

Inspecting both assemblies would require about 2 work-hours, for a estimated cost of \$170 per helicopter and \$18,190 for the U.S fleet, per inspection cycle.

Replacing a fire extinguishing bottle would require about 3 work-hours and parts would cost about \$6,432, for an estimated cost of \$6,687 per helicopter.

According to Leonardo's service information, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected

individuals. The FAA does not control warranty coverage by Leonardo. Accordingly, the FAA has included all costs in this cost estimate.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Will not affect intrastate aviation in Alaska, and

3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Leonardo S.p.a.: Docket No. FAA-2020-0413; Product Identifier 2017-SW-018-AD.

(a) Applicability

This AD applies to Leonardo S.p.a. Model A109E, Model A109S, and Model AW109SP helicopters, certificated in any category, with a fire extinguisher bottle part number (P/N) 27300-1 installed.

Note 1 to paragraph (a) of this AD: Fire extinguisher bottle P/N 27300-1 may be installed as part of fire extinguisher kit P/N 109-0811-39-103, P/N 109-0811-39-107, or P/N 109-0811-39-109.

(b) Unsafe Condition

This AD defines the unsafe condition as a crack on a fire extinguisher bottle bypass outlet assembly. This condition could result in failure of the fire extinguishing system in the event of a fire in the engine area and subsequent loss of control of the helicopter.

(c) Comments Due Date

The FAA must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

- (1) Within 25 hours time-in-service (TIS) and thereafter at intervals not to exceed 200 hours TIS, using a mirror and a light, inspect the weld beads of each fire extinguisher bottle bypass outlet assembly for a crack in the areas depicted in Figure 2 of Leonardo Helicopters Bollettino Tecnico (BT) No. 109EP-152, BT No. 109S-073, or BT No. 109SP-108, each dated December 15, 2016, or Alert Service Bulletin No. 109S-073 Revision A, dated November 23, 2018, as applicable to your model helicopter. Pay particular attention to each circled area. If there is a crack, before further flight, replace the fire extinguisher bottle.
- (2) After the effective date of this AD, do not install a fire extinguisher bottle P/N 27300-1 on any helicopter unless it has been inspected as required by paragraph (e)(1) of this AD.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch,

FAA, may approve AMOCs for this AD. Send your proposal to: Eric Haight, Aviation

Safety Engineer, Regulations and Policy Section, Rotorcraft Standards Branch, FAA,

10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone 817-222 5110; email 9-ASW-

FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or

under 14 CFR part 91, subpart K, the FAA suggests that you notify your principal

inspector, or lacking a principal inspector, the manager of the local flight standards

district office or certificate holding district office before operating any aircraft complying

with this AD through an AMOC.

(g) Additional Information

The subject of this AD is addressed in European Union Aviation Safety Agency

(previously European Aviation Safety Agency) (EASA) AD No. 2016-0261R1, dated

February 13, 2020. You may view the EASA AD on the Internet at

https://www.regulations.gov in the AD Docket.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 2620, Extinguishing System.

Issued on April 17, 2020.

Lance T. Gant, Director,

Compliance & Airworthiness Division,

Aircraft Certification Service.

[FR Doc. 2020-08622 Filed: 4/22/2020 8:45 am; Publication Date: 4/23/2020]

9